

The invention claimed is:

1                   **1.** A method of managing signal-processing resources of a  
2 multimedia platform that is designed for applying signal-processing  
3 operations to multimedia signals, comprising:  
4                   defining multimedia functions each capable of monitoring the  
5 operation of a set of multimedia platform signal-processing resources,  
6 putting them in contact, and adapting the contents of said signal-  
7 processing resource set depending on the multimedia signal to be  
8 processed; and  
9                   using said multimedia functions to apply said signal-  
10 processing operations to said multimedia signals.

1                   **2.** The method of claim 1 wherein:  
2                   prior to applying any signal-processing operations to  
3 multimedia signals, a multimedia function group is formed, wherein this  
4 group includes all multimedia functions required for processing multimedia  
5 signals in a given application.

1                   **3.** The method of claim 1 wherein:  
2                   defining multimedia functions comprises  
3 assembling basic functions that are configured for using the  
4 resources that are available on the multimedia platform.

1                   **4.** The method of claim 3 wherein:  
2                   prior to applying any signal-processing operations to  
3 multimedia signals, a multimedia function group is formed, wherein this  
4 group includes all multimedia functions required for processing multimedia  
5 signals in a given application.

1                   **5.** The method of claim 3 wherein:  
2                   each signal-processing resource of the multimedia platform  
3 belongs to a type of resource, and

4                   the signal-processing resources of a same type are  
5 controlled by the sam\ontrol instructions.

1                   **6.** The method of claim 5 wherein:  
2                   prior to applying any signal-processing operations to  
3 multimedia signals, a multimedia function group is formed, wherein this  
4 group includes all multimedia functions required for processing multimedia  
5 signals in a given application.

1                   **7.** The method of claim 3, wherein:  
2                   the resources that are available on the multimedia platform  
3 are declared to a negotiation device of the multimedia platform when they  
4 are powered-on for a first time.

1                   **8.** The method of claim 7 wherein:  
2                   prior to applying any signal-processing operations to  
3 multimedia signals, a multimedia function group is formed, wherein this  
4 group includes all multimedia functions required for processing multimedia  
5 signals in a given application.

1                   **9.** The method of claim 7 wherein:  
2                   each signal-processing resource of the multimedia platform  
3 belongs to a type of resource, and  
4                   the signal-processing resources of a same type are  
5 controlled by the same control instructions.

1                   **10.** The method of claim 9 wherein:  
2                   prior to applying any signal-processing operations to  
3 multimedia signals, a multimedia function group is formed, wherein this  
4 group includes all multimedia functions required for processing multimedia  
5 signals in a given application.

1                   **11.** An apparatus for managing signal-processing resources  
2 of a multimedia platform that is designed for applying signal-processing  
3 operations to multimedia signals, comprising:  
4                   means for defining multimedia functions each capable of  
5 monitoring the operation of a set of multimedia platform signal-processing  
6 resources, putting them in contact, and adapting the contents of said  
7 signal-processing resource set depending on the multimedia signal to be  
8 processed; and  
9                   means for using said multimedia functions to apply said  
10 signal-processing operations to said multimedia signals.

1                   **12.** A multimedia platform for defining multimedia functions  
2 each capable of monitoring the operation of a set of multimedia platform  
3 signal-processing resources, putting them in contact, adapting the  
4 contents of said signal-processing resource set depending on the  
5 multimedia signal to be processed, and using said multimedia functions to  
6 apply said signal-processing operations to said multimedia signals, and  
7 including a plurality of signal-processing resources, comprising:  
8                   a resource interface (3) wherein operations are defined that  
9 make it possible to control said signal-processing resources;  
10                  a resource management unit (2) for dynamically allocating  
11 signal-processing resources depending on the signal-processing operation  
12 to be carried out and managing exchanges among signal-processing  
13 resources;  
14                  an application interface (5) wherein said multimedia  
15 functions are defined; and  
16                  an application unit (4) having an application program for  
17 applying said multimedia functions.